



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,675	10/10/2006	Peter Brett	BOLTP001	1792
22434	7590	11/29/2007	EXAMINER	
BEYER WEAVER LLP			RAYMOND, EDWARD	
P.O. BOX 70250			ART UNIT	
OAKLAND, CA 94612-0250			PAPER NUMBER	
			2857	
			MAIL DATE	
			DELIVERY MODE	
			11/29/2007	
			PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/563,675		BRETT ET AL.	
	Examiner		Art Unit	
	/Edward Raymond/		2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15-18 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20060306</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-13 and 15-18** are rejected under 35 U.S.C. 102(b) as being anticipated by Pelrine et al.

3. Pelrine et al. teach a sensing system comprising:- a deformable load bearing surface (Claims 1 and 15: see paragraph 87), a plurality of mutually spaced sensors (Claims 1 and 15: see paragraphs 167-169), said sensors being coupled through the deformation response of the surface to an applied load whereby to receive local sensory data from said surface (Claims 1 and 15: see paragraph 152), a processor operatively coupled to said sensors and arranged to receive said sensory data from the sensors and to transform said sensory data into information data relating to a load applied to the surface (Claims 1, 15 and 17: see paragraph 84), and an output for outputting the information data, wherein the processor is arranged to process the sensory data received by all the sensors collectively (Claims 1 and 15: see paragraph 84).

Pelrine et al. teach a system wherein the information data has a non-linear relationship with the sensory data (Claims 2 and 16: see paragraph 90).

Pelrine et al. teach a system wherein said sensors are transducers (Claim 3: see paragraphs 81-83).

Pelrine et al. teach a system wherein said transducers are pressure differential based transducers (Claim 4: see paragraphs 50 and 51).

Pelrine et al. teach a system wherein the transducers are physically connected to or in contact with the surface (Claim 5: see paragraph 102).

Pelrine et al. teach a system wherein the system comprises a display device for displaying the information data (Claim 6: see paragraph 79).

Pelrine et al. teach a system wherein the output of the system serves as an input for a logging system or an automated system for controlling a specific process (Claim 7: see paragraph 78).

Pelrine et al. teach a system wherein the processor incorporates an algorithm or other interpretation function, such as a neural network or a matrix manipulation technique which receives the sensory data and applies a non-linear transform to produce the information data (Claim 8: see paragraph 152).

Pelrine et al. teach a system wherein the deformable load bearing surface is resiliently deformable (Claim 9: see paragraphs 167-169).

Pelrine et al. teach a system as claimed wherein the deformable load bearing surface forms part of a housing, the sensors being sealed therein (Claim 10: see Figure 5A) .

Pelrine et al. teach a system wherein the housing contains a flowable material which flows within or under the surface as part of the mechanism of the deformation response of the surface, and the sensors are arranged to detect pressure differentials due to the flow of material (Claim 11: see paragraph 141).

Pelrine et al. teach a system wherein the housing also comprises one or more flow restrictors which affect the flow characteristics of the flowable material upon deformation of the surface (Claim 12: see paragraph 141).

Pelrine et al. teach a system wherein the surface is planar (Claim 13: see Figure 5A).

Pelrine et al. teach a carrier medium wherein said carrier medium is a storage medium, such as a floppy disk, CD-ROM, DVD or a computer hard drive (Claim 18: see paragraph 128).

Allowable Subject Matter

4. **Claim 14** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Edward Raymond/ whose telephone number is 571-272-2221. The examiner can normally be reached on M-F 8:30-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eliseo Ramos-Feliciano can be reached on 571-272-7925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/563,675
Art Unit: 2857

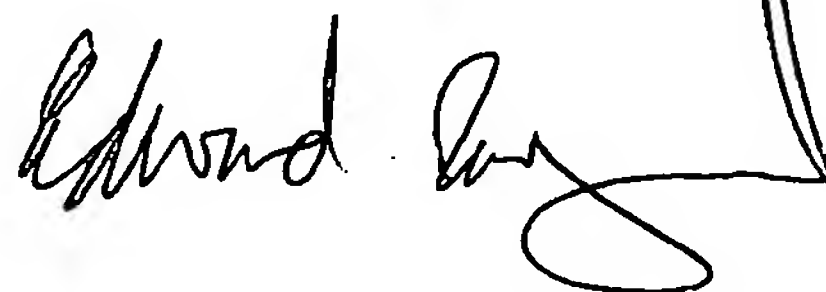
Page 5

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Edward Raymond/
Primary Examiner
Art Unit 2857

er

EDWARD RAYMOND
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read "Edward Raymond", with a large, stylized flourish at the end.